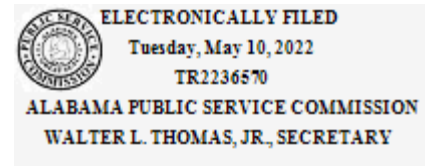


May 10, 2022



Via E-File & Hand Delivery

Mr. Walter L. Thomas, Jr., Secretary
Alabama Public Service Commission
RSA Union Building
100 North Union Street, Suite 950
Montgomery, AL 36104

RE: Docket No. 33182; Alabama Power Company Petition for Certificate of Convenience and Necessity

Dear Secretary Thomas:

On behalf of Intervenor Energy Alabama and GASP, please find the enclosed redacted and public version of *Brief of Energy Alabama and GASP in the Form of Proposed Order* for the above referenced matter. This document is being filed pursuant to the procedural ruling issued by the Commission on November 19, 2021, in this docket. Intervenor Energy Alabama is submitting this filing to the Commission through its e-filing system consistent with the rules and practices of the Commission and the orders from the Commission. A service copy of the public filing will be served on parties on the service list in this matter.

A confidential, non-public version is being sent via overnight mail to the Commission's Legal Division. The same will be served on counsel for Alabama Power Company.

Please contact me if you have any questions or concerns regarding the enclosed filing.

Sincerely,

s/ Keith Johnston

Keith Johnston
Southern Environmental Law Center

Enclosure

**BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION**

**In re: Petition for a Certificate of
Convenience and Necessity by
Alabama Power Company**

Docket No. 33182

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**BRIEF OF ENERGY ALABAMA AND GASP
IN THE FORM OF PROPOSED ORDER**

BY THE COMMISSION:

INTRODUCTION

Alabama Power Company (“Alabama Power” or “Company”) comes before this Commission by virtue of a Petition for a Certificate of Convenience and Necessity (“Petition”) seeking authorization to acquire the Calhoun Power Company, LLC near Eastaboga, Calhoun County, Alabama (“Calhoun Power Facility” or “Calhoun Facility” or “Calhoun”). The Calhoun Power Facility is made up of four simple-cycle combustion-turbine units with a combined winter capacity rating of 743 megawatts and combined summer capacity rating of 637 megawatts. This filing was duly noticed and a cycle of direct, responsive, and rebuttal testimony filed. Discovery was pursued by the parties, and a deposition was taken. A public hearing has been held.

Based on the record compiled in this case, including testimony, discovery provided to Commission Staff, deposition testimony, and the testimony and exhibits provided at the public hearing, we find that the Petition is not adequately supported by evidence available to the Commission. On the basis of the evidentiary record and hearing in this matter, the Commission

finds that the Petition is incomplete and should be denied. However, the Commission will withhold a final decision pending receipt within 120 days of this Order additional information from the Company as set forth below. The Commission will issue a final decision at the conclusion of the 120-day period and after review of all information provided by the Company.

PRODCEDURAL HISTORY

On October 28, 2021, pursuant to Alabama Code § 37-4-28 and Part A of Rate CNP – Adjustment for Commercial Operation of Certificated New Plant, Alabama Power filed a Petition for a Certificate of Convenience and Necessity with the Commission. In Alabama Power’s Petition, the Company requested that the Commission issue an order authorizing the Company to acquire the generation plant and all related facilities currently owned by Calhoun Power Company, LLC near Eastaboga, Alabama. The Calhoun Facility is made up of four simple-cycle combustion-turbine units with a combined winter capacity rating of 743 megawatts and combined summer capacity rating 637 megawatts.¹ The estimated life of the units is now approximately 20 years.² In support of its Petition, the Company filed the testimony of John B. Kelley, Director of Forecasting and Resource Planning.

On November 4, the Company filed a revised exhibit, Exhibit JBK-4, to its Petition along with changes to the testimony of Mr. Kelley. These changes to the testimony revised the costs of alternative sources of electric generation compared to the Calhoun acquisition. On November 15, the Alabama Attorney General and Energy Alabama and GASP (jointly, “Energy Alabama/ GASP”) moved to intervene in this matter. On November 19, the Commission entered an order

¹ Petition for a Certificate of Convenience and Necessity, Ala. P.S.C Docket No. 33182 (Oct. 28, 2021), at page 2, para. 2.

² *Id.*

granting the interventions and establishing a procedural schedule (“Procedural Order”). Among other dates, the Procedural Order set a public hearing date of April 12, 2022.

In December, the parties began the discovery process, and on December 22, the Commission issued a *Procedural Ruling Regarding Discovery and Depositions* (“December 22 Ruling”). This ruling established the procedures for filing confidential and non-confidential discovery information with the Commission.

On January 7, 2022, Energy Alabama/GASP filed an *Unopposed Motion for Extension of Time* for the submission of intervenor testimony until January 20, which was subsequently granted by the Commission. Energy Alabama/GASP filed their direct testimony on January 20, 2022.

According to the Procedural Order, Alabama Power filed rebuttal testimony on March 10, 2022. Also according to the Procedural Order, written discovery closed on March 18 and the opportunity to take depositions closed on April 1. One deposition was taken during this matter of John B. Kelley, and that deposition was filed with the Commission and accepted into the record per the December 22 Order.

On April 8, 2022, Energy Alabama/ GASP filed an amended discovery response and an amended table to expert Karl Rábago’s direct testimony. On April 12, a public hearing was held on this matter in the Commission’s Main Hearing Room in Montgomery. Per the Procedural Order, post-hearing briefs in the form of proposed orders were submitted May 10, 2022, by the parties in this matter.

GOVERNING LEGAL STANDARDS

The Commission has general supervisory jurisdiction over Alabama Power pursuant to Alabama Code § 37-1-32. Pursuant to that authority, the Commission has a statutory duty to “inquire into the management of the business and [to] keep itself informed as to the manner and

method in which the business is conducted.” *Id.* The Commission likewise has a statutory duty to perform ongoing supervision of the Company’s overall financial health, the needs of its generating fleet, and its responsibility to render adequate service. *Id.* The Commission has authority to grant or deny the Company’s Petition, in whole or in part, and to prescribe any conditions it deems advisable to accompany its grant of approval. Ala. Code § 37-4-28.

As a regulated public utility, Alabama Power has a statutory duty to “render adequate service to the public and [to] make such reasonable improvements, extensions and enlargements of its plants, facilities and equipment as may be necessary to meet the growth and demand of the territory which it is under the duty to serve.” Ala. Code § 37-1-49. The Company may not proceed with the construction or acquisition of generating units without this Commission’s approval in the form of a certificate of convenience and necessity. *Id.* § 37-4-28.

In a certificate proceeding such as this, the Commission has historically viewed its role as involving two fundamental determinations. First, it must determine whether the Company has shown a need for additional capacity.³ Second, the Commission must determine whether the proposed facilities are a reasonable means of satisfying that need.⁴ The Commission has consistently interpreted the latter element as requiring the most cost-effective solution to the Company’s capacity need.⁵ Cost-effective in this context is synonymous with least-cost.

³ Report and Order at 3, Ala. Power Co. Petition for a Certificate of Pub. Convenience & Necessity, Docket No. 26115 (Ala. P.S.C. Dec. 31, 1997).

⁴ *Id.*

⁵ See, e.g., Order at 2, Ala. Power Co. Petition to Amend an Existing Certificate of Convenience & Necessity, Docket 27785 (Ala. P.S.C. Apr. 22, 2009).

Ultimately, the Commission must determine, under the totality of the circumstances before it, whether granting the certificate is just and reasonable and in the public interest.⁶

DISCUSSION

I. Alabama Power Used A Flawed, Piecemeal Approach To Request A Certificate Of Convenience And Necessity To Acquire The Calhoun Power Facility.

The evidence in this matter shows that Alabama Power initiated the acquisition of the Calhoun Facility in a process that does not ultimately benefit Alabama ratepayers; it is disconnected from the Company's own long-term planning process and any other decision that the Company has made about new generation over the last several years. As a result, neither the Commission nor the public has a holistic, system-based understanding of the Company's proposal, alternatives to the proposal or whether the Calhoun Facility is the most cost-effective long-term choice for the Company's ratepayers. Alabama Power made the decision to acquire the Calhoun Facility on an ad hoc basis without an evaluation of resource choices to optimize operation of the Company's system as a whole based on the needs identified in the Company's most recent integrated resource plan ("IRP"). Decisions that are in the best interest of ratepayers require a full and transparent process from the beginning, and that process did not take place here. The Company should have solicited up-to-date capacity proposals in response to the needs identified in its 2021 IRP, which the Company reports exceed the 750 megawatts at issue with the proposed retirement of Plant Barry Unit 5.

⁶ Ala. Power Co. Petition for a Certificate of Convenience & Necessity, Docket No. 32382 (Ala. P.S.C. Sept. 16, 2015).

A. The flawed comparison of the immediate acquisition of the Calhoun Power facility to the continued operation of Plant Barry Unit 5 makes Alabama Power's analyses and Petition unreasonable.

The Company's starting point and premise of this Petition is that the purchase of the Calhoun Power Facility will replace an approximate 750 megawatts of capacity need created by the expedited retirement of Barry Unit 5 at the end of 2023.⁷ However, this bright line starting point as constructed by the Company, based on the capacities of Calhoun and Barry Unit 5, is an unnecessary forced choice. The decision of how and where to best replace 750 megawatts of lost capacity in Alabama Power's generation portfolio in the near future should not revolve solely around the Company's decision to retire Barry Unit 5 due to Effluent Limitations Guidelines Rules (the "ELG rules") and corresponding compliance concerns.⁸ Replacement of a large block of capacity like the 750 megawatts provided by Barry Unit 5 should go through a robust, transparent and up-to-date analysis that thoroughly evaluates alternatives to provide Alabama Power customers with the best long-term result.⁹ There should not be a presumption that, just because one generation resource has the same nameplate capacity as another resource, that a swap is the reasonable choice.

In its testimony, the Company states that the equivalencies in capacity for both Calhoun and Barry Unit 5 of approximately 750 megawatts happens to be a coincidence, but then the Company goes on to describe this proposal as a "swap" or "replacement" of equivalent capacity.¹⁰ Mr. Kelley specifically states that he would not want to "break up" the approximately 750

⁷ Hearing Tr., page 99, lines 20–23 through page 100, line 1.

⁸ Direct Testimony of Karl Rábago, page 13, lines 12–20 through page 14, lines 1–3.

⁹ *Id.*, page 30, lines 3–11.

¹⁰ John B. Kelley Deposition, page 96, lines 4–23 through page 97, lines 1–3; Hearing Tr., page 95, lines 16–23 through page 96, lines 1–8.

megawatts.¹¹ The evidence shows that the Company believes that it is in the best interest of ratepayers to simply swap approximately 750 megawatts for 750 megawatts, not taking into account the unique attributes and operation of each generation resource. These resources are different and provide different operational values to the system as a whole—distinctions which underscore the need for a holistic evaluation of replacement options.¹²

Foremost, Calhoun operates significantly less than Barry Unit 5. The Calhoun Facility is made up of peaker units, and this means that its actual hours of operation will mostly be during peak demand, a time when gas prices will likely be significantly higher.¹³ Calhoun operates only a few hours in the year, in total.¹⁴ In contrast, Barry Unit 5 has a history of running significantly more than Calhoun and operates as more of a baseload unit.¹⁵ These differences mean that a 750 megawatts “swap” of one generation type for another is not an “apples-to-apples” comparison as constructed by the Company in the record.

In addition, replacing approximately 750 megawatts of coal-fired generation with approximately 750 megawatts of gas, or oil,¹⁶ generation brings along with it concerns of gas’ volatile price swings and supply issues, especially in times of peak demand. This is nowhere more evident than in the past year, in which Alabama Power’s average natural gas fuel price increase was larger than any other fuel source.¹⁷ Transport delays, variations in weather, forced outages,

¹¹ Hearing Tr., page 96, lines 19–21.

¹² Direct Testimony of Karl Rábago, page 15, lines 5–10.

¹³ John B. Kelley Deposition, page 154, lines 18–23 though page 155, lines 1–15.

¹⁴ *Id.*

¹⁵ Rebuttal Testimony of John B. Kelley, page 17, lines 2–17.

¹⁶ John B. Kelley Deposition, page 156, lines 6–9 (Mr. Kelley describes the Calhoun Facility running on oil during “very, very cold times”).

¹⁷ Energy Alabama/GASP Hearing Ex. 3, Southern Company Form 10-K (for fiscal year ended Dec. 31, 2021) page II-21.

demand in domestic and international supply, environmental compliance issues (such as concerns regarding greenhouse gas emissions), as well as other factors have the ability to significantly affect natural gas availability and price.¹⁸ The Company cannot say that capacity similarities are coincidental, then claim that the 750 megawatts of Calhoun fits perfectly for the immediate need of the Company where the resources being swapped are very different in hours of operation, fuel source, and environmental controls. Most importantly, the proposed acquisition of peaker units at Calhoun means that Alabamians will be paying for extra generation capacity that gets little use for the next twenty-plus years.¹⁹

The results of this unnecessary forced choice by the Company between the continued operation of Barry Unit 5 and acquisition of the Calhoun Facility are evident in the record before the Commission. For example, the Company did not solicit a current capacity RFP for the replacement of Barry Unit 5; an up-to-date capacity solicitation would generate the most current information about the price and availability of alternative resources tailored to the needs the Company identified in its 2021 IRP.²⁰ Such an analysis would be the basis for filling a capacity need in almost every utility's analyses. Instead, the Company relied on Mr. Kelley's belief that a new capacity solicitation was "unnecessary" because they (or he) "knew" that the Company had a good offer based on the sales price of five combustion turbines in other parts of the country, two of which are only few years old and another two are still under construction.²¹ Mr. Kelley's beliefs should have been tested against what the market had to offer with a new solicitation of capacity

¹⁸ *Id.* at page I-18.

¹⁹ Hearing Tr., page 211, lines 5–16.

²⁰ *Id.*, page 80, line 23 through page 81, lines 1–10 (stating that the Company used its capacity RFP from the 2020 solicitation); John B. Kelley Deposition, page 90, lines 12–14 (stating that the Company never conducted a capacity RFP to replace Barry Unit 5); Hearing Tr., page 96, lines 9–13.

²¹ Direct Testimony of John B. Kelley, Ex. JBK-5; Hearing Tr., page 96, lines 9–22.

for resources that are not solely combustion turbines and are located nearby. The public, the Company and the Commission do not know what opportunities a new solicitation for capacity might reveal, and how those resources might better fit the peak capacity needs as projected by the Company. The failure to solicit comparable alternatives to the proposed acquisition with an up-to-date capacity RFP for replacement of Barry Unit 5 makes the Company's Petition fundamentally flawed. The Company enjoys the discretion to craft its Petition in the manner it chooses, but the Commission's requirement is clear; it must provide a record that demonstrates that the proposed acquisition is reasonable and in the public interest.

B. Alabama Power initiated a rushed process that was unreasonable to determine the least-cost resource.

The evidence in this matter also shows that Alabama Power initiated the acquisition of Calhoun Power Facility in a rushed process that circumnavigated prudent practices for resource planning. The decision to acquire Calhoun was made outside of any normal planning process.

As an example, Alabama Power approached the Harbert Corporation about the Calhoun Facility in March of 2021.²² By September, the purchase and sale contract to buy Calhoun was finalized,²³ and the Company filed this Petition in October. That accelerated timeline, *after* completion of the 2021 IRP, ensured that no analysis of this "swap" was considered in the 2021 IRP, along with other generation needs of the Company. In fact, the Company produced no IRP during discovery or even a summary report of the basis for its analysis when determining reliability needs and capacity.²⁴ There has also been no public notice of the development of a 2021 Alabama

²² Hearing Tr., page 105, lines 1–3; page 107, lines 4–6.

²³ *Id.*, page 105, lines 18–22.

²⁴ Direct Testimony of Karl Rábago, page 8, lines 6–10.

Power IRP or any involvement of the public in that process.²⁵ The rush to acquire the Calhoun Facility in approximately six months and the complete lack of public involvement in the planning process make it impossible for the Commission to determine whether this is the best, most-cost effective option for ratepayers.

The Company portrays this acquisition of Calhoun as good timing and a good deal for ratepayers because of the required and needed retirement of Barry Unit 5 due to the ELG rules for coal-fired power plants. But the assertion that the finalization of the ELG rules, and the subsequent Notice of Planned Participation filed in October by the Company to comply with the ELG rules, as the urgent “driver” for the Calhoun acquisition represents extremely poor long-term resource planning by a well-resourced utility.²⁶ The ELG rules were promulgated decades ago and finalized in 2015 and 2020.²⁷ We know that Alabama Power was, as any prudent utility would, considering the impacts of these rules on specific units in 2015, if not well before.²⁸ The Company cannot now claim that the age and poor environmental performance of Barry Unit 5, or the regulatory pressure to correct the problems or shut down the unit, was just a few months in the making and reasonable justification for a rushed and inadequately analyzed “swap” of its megawatts for those of the Calhoun Facility. The resource need created by the retirement of Barry Unit 5, if it exists, was not addressed in the 2021 IRP. The Company did not survey the market for available resources based on that IRP. A proper analysis with the proper amount of lead time may have and could still lead to better resource choices on behalf of Alabama Power customers.

²⁵ Hearing Tr., page 58, lines 3–11.

²⁶ *Id.*, page 99, lines 17–19.

²⁷ See EPA, Steam Electric Power Generating Effluent Guidelines, <https://www.epa.gov/eg/steam-electric-power-generating-effluent-guidelines#rulemaking> (last visited May 9, 2022).

²⁸ Hearing Tr., page 100, lines 12–23 through page 101, lines 1–6.

The rushed process initiated by Alabama Power ensured that any in-depth generation comparisons would not happen and the process which generated this Petition was therefore unreasonable. This means that ratepayers will spend well over \$180 million dollars of ratepayer money to purchase a used fossil fuel plant, and that ratepayers will be responsible for operations and maintenance costs, fuel costs and environmental compliance costs that come along with the Calhoun Facility for approximately the next twenty years. The Company made a unilateral decision and reversed engineered the supporting analyses. The Commission must take the broader view and must have a record that evaluates the currently known and future costs of the proposed acquisition in the context of a full comparison of the economics, performance and other aspects of alternative resources. The Company did not provide the Commission with that record.

C. Reliability has not been a concern, and demand is projected to fall or remain flat.

The record raises questions about whether Alabama Power must immediately replace the capacity of Barry Unit 5 in order to retire it by the end of 2023. Less than two years ago, Alabama Power secured this Commission's approval of one of the largest single capacity expansions the Company has ever proposed.²⁹ This generation expansion created approximately 2,000 megawatts of new capacity. The demand side and distributed resources of the certificate in Docket No. 32953 have yet to be fully implemented;³⁰ yet, the Company has come back to the Commission for more generation capacity. These decisions have serious implications for customers. Docket No. 32953 approved in August of 2020 was a \$1.1 billion dollar generation expansion by the Company that will increase ratepayers' bills, and this proposed acquisition of the Calhoun Power Facility will

²⁹ Ala. Power Co. Petition for a Certificate of Convenience & Necessity, Docket No. 32953, Order (Ala. P.S.C. August 14, 2020).

³⁰ See John B. Kelley Deposition, page 198, lines 1–17.

add another approximately \$0.96 per month on top of those new increased costs (not including the fuel costs for Calhoun over time).³¹

Actual data from past winters also substantially weakens the assertion that there is a reliability-related rush to acquire the Calhoun facility. Alabama Power's 2021 IRP projects capacity deficits in 2022-2025 and 2028-2031 to meet the Company's higher 24.76% - 25.25% winter target reserve margins.³² The Commission notes, however, that the Company has had no winter reliability concerns since at least 2019, and likely before,³³ despite *projected* consistent capacity deficits projected by the Company. Mr. Kelley cited to warmer days on peak projected demand in 2019 as at least one reason that reliability concerns had not materialized.³⁴

And Alabama Power's own data shows that projected demand will not rise at least through 2031. The Company's data from the 2021 IRP projects that peak demand will fall from 2022 – 2025 and remain relatively stable from 2026 – 2031.³⁵ As confirmed by the Company in the hearing in this case, Alabama Power's actual peak demand in the winter of 2021-22 was lower than that projected by the Company.³⁶ Mr. Kelly described this lower to flat demand as due, in part, to increase efficiencies by Alabama Power's customers.³⁷ The Company provided no evidence that this trend would reverse, or that there was a reasonable likelihood of reliability-impacting increases in demand in the foreseeable future. As housing and building stock turn over

³¹ Hearing Tr., page 123, line 14 through page 127, line 5.

³² Direct Testimony of John B. Kelley, page 6, Table 1.

³³ Hearing Tr., page 62, lines 2–23.

³⁴ *Id.*, page 64, lines 1–20.

³⁵ Direct Testimony of John B. Kelley, page 6, Table 1; Hearing Tr., page 66, lines 14–23 through page 67, lines 1–18.

³⁶ Hearing Tr., page 63, lines 16–23.

³⁷ John B. Kelley Deposition, page 72, lines 13–16.

and as customers seek ways to manage their electric bills more effectively, the efficiency of electricity use will likewise improve. The Company's operations data does not support a rush to judgment about how or even whether to replace the output of Barry Unit 5 and especially does not support the acquisition of a simple-cycle peaking plant to achieve that result.

The Commission must determine, under the totality of the circumstances before it, whether granting the certificate is just and reasonable and in the public interest.³⁸ When the totality of circumstances surrounding this Petition are considered, the Commission finds that the rushed and piecemeal process that the Company used to justify the acquisition of the Calhoun Power Facility is an inadequate foundation for the Company's requested determination.

II. Alabama Power Did Not Fully And Fairly Evaluate Alternatives To The Calhoun Plant.

Alabama Power has not demonstrated that the Calhoun Facility is the most cost-effective solution to the Company's capacity needs because it did not fully and fairly evaluate solar paired with battery storage ("solar/BESS") projects as an alternative. The Company understands that solar/BESS projects are cost-effective resources. It sought approval for 400 megawatts of these projects as part of a suite of new generation proposed in 2019.³⁹ But here, the Company's analysis of the cost of these resources has three defects that unfairly tip the balance in favor of the Calhoun Facility. First, the Company insisted that it must consider a unitary 750-megawatt package of seventeen solar/BESS projects,⁴⁰ failing to evaluate whether a subset of these projects could get

³⁸ Order at 11, Ala. Power Co. Petition for a Certificate of Convenience & Necessity, Docket No. 32382 (Ala. P.S.C. Sept. 16, 2015).

³⁹ Hearing Tr., page 56, lines 7–16.

⁴⁰ Direct Testimony of John B. Kelley, page 14, lines 294–297; Hearing Tr., page 169, lines 14–23 through page 170, lines 1–2.

the Company most of the way there at a lower cost than buying the Calhoun Facility.⁴¹ Second, the Company hamstrung its evaluation by limiting it to only those solar/BESS projects less than or equal to 80 megawatts, foregoing the logical economies of scale that could result from larger projects.⁴² Finally, the Company overstated the costs of the solar/BESS projects by (i) adding the operating costs of Barry Unit 5 without determining that continued operation was the lowest cost short-term capacity available⁴³ and (ii) ignoring system benefits.⁴⁴ The compounded effect of these shortcomings is that the Company has not presented a full and fair evaluation of the solar/BESS projects as an alternative to the Calhoun acquisition. The record before the Commission leaves unresolved this important question—is a suite of new solar/BESS projects, combined with an available market option like a short-term PPA to fill the gap while the new projects come online, a more cost-effective resource than the Calhoun Facility? The Commission will require additional information to answer this question before it reaches a final decision.

A. The Company overlooked solar/BESS projects with the potential to replace some or most of Barry Unit 5's capacity at a lower cost.

Alabama Power's alternatives analysis is based on identifying single-type 750-megawatt alternatives to compare against the Calhoun Facility as a replacement option for Barry Unit 5.⁴⁵ That premise does not correspond with the Company's purported capacity needs which it reports

⁴¹ Hearing Tr., page 157, lines 10–23 through page 158, lines 1–7 (identifying the potential of an individual solar/BESS project to result in net savings); John B. Kelley Deposition, page 189, lines 11–16.

⁴² Hearing Tr., page 82, lines 10–22.

⁴³ Rebuttal Testimony of John B. Kelley, page 12, lines 13–18.

⁴⁴ Hearing Tr., page 85, lines 2–6 and page 87, lines 11–13; John B. Kelley Deposition, page 195, lines 8–14 and page 196, lines 18–20.

⁴⁵ Hearing Tr., page 96, lines 5–7 (“We’re looking for 750 megawatts . . . to compare with Calhoun.”); Hearing Tr. 126:113–17 (“I would offer that what we’re trying to do here is find the most cost-effective way to replace the Barry 5 capacity . . .”).

are, at a minimum, almost double 750 megawatts in 2023.⁴⁶ Rather than confronting its capacity needs in a holistic, system-based way that optimizes operation of its fleet, the Company anchors its alternatives analysis to a constrained set of options that provide a strict, megawatt-for-megawatt replacement of Barry Unit 5.⁴⁷ As a result, the Company did not recognize or evaluate a group of individual solar/BESS projects with the potential to replace some or most of Barry Unit 5's capacity at a lower cost than the Calhoun Facility.

For example, to evaluate solar/BESS projects as an alternative, the Company grouped seventeen proposals that it had received in 2020 into a 750-megawatt package.⁴⁸ It concluded that these seventeen projects, with required transmission improvements, would have a per kilowatt cost of \$632, more than the \$497 it calculated for the Calhoun Plant.⁴⁹ Within this group were some extremely cost-effective individual projects with the potential to produce a net *savings* for the Company if they were installed.⁵⁰ But the Company never asked itself the next logical question—if some individual solar/BESS projects would produce a net savings for customers, how many of the most cost-effective projects could be grouped together for a total cost less than \$497 per kilowatt?⁵¹ Based on the Company's data in Hearing Exhibit 7 (labeled Confidential SELC DR-1, I-34, Attachment B), it appears that a significant percentage of Barry Unit 5's capacity could be cost-effectively replaced by these projects.⁵²

⁴⁶ Direct Testimony of John B. Kelley, page 10, line 197 (identifying a 2023, post-retirement of Barry Unit 5, capacity shortfall with Calhoun of 1,376 megawatts and without Calhoun of 2,119 megawatts).

⁴⁷ Hearing Tr., page 96, lines 5–7.

⁴⁸ Direct Testimony of John B. Kelley, page 14, 294–297; Hearing Tr., page 80, lines 5–22.

⁴⁹ Rebuttal Testimony of John B. Kelley, page 9, lines 7–11.

⁵⁰ Hearing Tr., page 157, lines 10–23 through page 158, lines 1–7; Energy Alabama/GASP Hearing Ex. 7, Confidential SELC DR-1, I-34, Attachment B ([REDACTED] worksheet).

⁵¹ Hearing Tr., page 170, lines 3–22.

⁵² Hearing Ex. 7, Confidential SELC DR-1, I-34, Attachment B ([REDACTED] worksheet).

Specifically, the Company assigned about [REDACTED] in transmission costs to the group of seventeen solar/BESS projects and allocated these costs to the portfolio which totaled [REDACTED].⁵³ If the Company had instead assigned transmission costs to individual projects (simply dividing the total transmission costs by the total number of megawatts of solar/BESS projects and adding that cost to each project),⁵⁴ it would have determined which *individual* projects were *individually* more cost-effective than the Calhoun Facility and whether a group of the most cost-effective projects are an economically superior alternative. The Company already has all the data it needs to determine what subset of its seventeen solar/BESS projects is cumulatively more cost-effective than acquisition of the Calhoun Facility. It must provide this analysis to the Commission.

B. Alabama Power arbitrarily limited its analysis to solar/BESS projects that are 80 megawatts or less.

Alabama Power arbitrarily hamstrung its consideration of solar/BESS projects by limiting its analysis to projects that are 80 megawatts or less and meet certain other restrictive criteria. The Company's evaluation is based on proposals that it received in 2020 as part of a solicitation for the Renewable Generator Certificate ("RGC") docket—not an IRP—which requires that projects be 80 megawatts or smaller, located in Alabama, and limited to 160 megawatts in any given year.⁵⁵ But the Company never explains why the replacement of Barry Unit 5 must be limited to solar/BESS projects of this size or why it adhered to this limitation while ignoring other limitations

⁵³ *Id.* [REDACTED] worksheet); Hearing Tr., page 161, lines 21–23 through page 162, lines 1–9.

⁵⁴ [REDACTED]

⁵⁵ Hearing Tr., page 82, lines 10–23 through page 83, lines 1–7; John B. Kelley Deposition, page 163, lines 5–14; Direct Testimony of John B. Kelley, page 14, lines 294–297.

imposed by the RGC process, like the requirement that only 160 megawatts be installed in any given year.⁵⁶ The Company's witness, Mr. Kelley, even acknowledges that "larger projects could be more cost-effective and create economies of scale" for customers.⁵⁷ A more accurate description of the Company's analysis is that it purports to examine whether a suite of solar/BESS projects *that are each 80 megawatts or less* are more cost-effective than acquisition of the Calhoun Facility. The Company does not know and has not tried to determine whether larger solar/BESS projects will save customers money. Therefore, the Commission cannot find that the proposed acquisition of the Calhoun Facility is cost-effective.

C. Alabama Power overstated the costs of the solar/BESS projects.

Alabama Power overstated the costs of the solar/BESS projects (i) by adding the operating costs of Barry Unit 5 without determining that continued operation was the lowest cost available short-term capacity⁵⁸ and (ii) by ignoring system benefits.⁵⁹ According to Mr. Kelley's rebuttal testimony, the Company assigned an additional \$331/kW to the solar/BESS projects for the continued operation of Barry Unit 5 until the new projects could be brought online.⁶⁰ Yet the Company admits that while "short-term market resource options" might be an alternative to the continued operation of Barry Unit 5, it did not evaluate those options to determine the most cost-effective means to fill this timing gap.⁶¹ The IRP of affiliated utility, Georgia Power, demonstrates

⁵⁶ John B. Kelley Deposition, page 163, lines 5–14.

⁵⁷ Hearing Tr., page 82, line 23 through page 83, lines 1–3.

⁵⁸ Rebuttal Testimony of John B. Kelley, page 12, lines 13–18.

⁵⁹ Hearing Tr., page 85, lines 2–6 and page 87, lines 11–13; John B. Kelley Deposition, page 195, lines 1–14 and page 196, lines 18–20.

⁶⁰ Rebuttal Testimony of John B. Kelley, page 10, lines 9–15; page 11, lines 7–12; and page 12, lines 8–12.

⁶¹ *Id.*, page 12, lines 13–18.

that such options are not merely theoretical. In January, Georgia Power proposed the acquisition of *six power purchase agreements* from gas-fired plants “with low-capacity prices,” including three agreements that start in 2024 totaling 1,671 megawatts.⁶² Therefore, short-term market alternatives to the continued operation of Barry Unit 5 are not theoretical, and the Company must review, evaluate, and present these options to the Commission.

Finally, the Company overlooked system-wide operational benefits that could result from the solar/BESS projects. First, these projects require a significant investment in transmission improvements, which have the potential to make the Company’s transmission system more robust and to facilitate future projects.⁶³ The Company did not account for benefits resulting from this large investment in its transmission system when it evaluated the solar/BESS projects.⁶⁴ Second, the Company also acknowledged the potential “operational benefits” of batteries but again did not assign these benefits a value in its analysis.⁶⁵ In contrast, Georgia Power’s 2022 IRP “identified a growing need for additional energy storage capabilities to support the continued reliable and cost-effective operation” of the Georgia Power system and used a technical cost-benefit analysis to quantify “the substantial benefits” that battery storage can provide.⁶⁶ The Company cannot reasonably ignore the ancillary benefits of the solar/BESS projects by asserting they are not understood⁶⁷ when other utilities are already performing this analysis. For this final reason, the Commission cannot find that the proposed Calhoun acquisition is cost-effective.

⁶² Energy Alabama/GASP Hearing Ex. 2, Georgia Power 2022 Integrated Resource Plan 11-77.

⁶³ Hearing Tr. page 85, lines 2–6; John B. Kelley Deposition, page 194, lines 18–21 and page 195, lines 1–14.

⁶⁴ Hearing Tr., page 85, lines 2–6.

⁶⁵ *Id.*, page 87, lines 11–13.

⁶⁶ Energy Alabama/GASP Hearing Ex. 2, Georgia Power 2022 Integrated Resource Plan 13-89–13-93.

⁶⁷ Hearing Tr., page 85, lines 16–23 through page 86, lines 1–4.

FINDINGS AND CONCLUSIONS

After full consideration of the record evidence and information made available to the Commission in this matter, the Commission **FINDS** that the proposed Certificate of Convenience and Necessity should not be granted until the Commission has more information about the need and reasonableness of the proposed acquisition of the Calhoun Power Facility.

WHEREAS Alabama Power was certified over 2000 megawatts of new generation capacity less than two years ago in August of 2020;

WHEREAS the certificated petition in August of 2020 was one of the largest capacity expansions ever initiated by the Company;

WHEREAS there have been no winter reliability concerns in the interim, and the majority of the expansion resources will come online by 2024;

WHEREAS the Company has now proposed to retire its coal-fired Barry Unit 5 by the end of 2023 and replace it with the natural gas-fired Calhoun Power Facility;

WHEREAS electricity usage and bills for residential customers in Alabama are among highest in the United States, low-income Alabamians carry extraordinarily high home electricity burdens and high electric bills in Alabama threaten home energy security and severely impact lower-income households.

The Commission **FINDS** that the Company's decision to acquire the Calhoun Facility has not been made in conjunction with the Company's integrated resource planning and that the public interest would benefit from the holistic, system-wide evaluation afforded by that process to optimize operation of the system for this and future generation decisions.

The Commission **FURTHER FINDS** that natural gas availability for the Calhoun Facility will be dependent on and subject to a variety of risk factors, including forced outages; price

volatility, such as the high gas prices experienced by Alabama Power in 2021; supply and demand issues; weather constraints; and other risks.

The Commission **FURTHER FINDS** that the public interest would benefit from updated information concerning reliability and peak demand.

The Commission **FURTHER FINDS** that the public interest would benefit from updated solicitations for capacity in response to the needs identified in the Company's most recent integrated resource plan, including solar/BESS proposals not limited by the constraints of the Renewable Generator Certificate docket and short-term power purchase agreements.

The Commission **FURTHER FINDS** that the public interest would benefit from a re-evaluation of a solar/BESS alternative based on the data that the Company provided in this proceeding.

IT IS, THEREFORE, ORDERED BY THE COMMISSION that the Company provide updated capacity solicitations for replacement of Barry Unit 5.

IT IS FURTHER ORDERED BY THE COMMISSION that the Company provide an evaluation of the most cost-effective solar/ BESS projects from its portfolio of seventeen projects that, as a group, would cumulatively provide superior economics to the acquisition of the Calhoun Facility. For comparison purposes, this analysis should be performed without the addition of costs for the continued operation of Barry Unit 5.

IT IS FURTHER ORDERED BY THE COMMISSION that the Company provide data on the availability and cost of short-term power purchase agreements as an alternative to the continued operation of Barry Unit 5.

IT IS FURTHER ORDERED BY THE COMMISSION that a final decision on the Petition is hereby postponed until more information and analyses are provided by the Company as set forth in this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that, if the Company desires to pursue a certificate to obtain the Calhoun Power Facility, the information cited in this section shall be provided to the Commission and public (that which is not confidential) within 120 days of the effective date of this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that this Order shall be effective as of the date hereof:

Public Version

Respectfully submitted this 10th day of May, 2022.

s/ Keith Johnston

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CERTIFICATE OF SERVICE

I certify that copies of the foregoing have been served on the following counsel and interested parties this the 10th day of May, 2022.

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